

AMENDMENTS

IN THE CLAIMS

1. (currently amended) A method for using multiple network addresses for interprocess communication through a common physical layer, said method comprising the steps of:

creating a first interprocess communication data structure associated with a first network
5 address on a first network device;

establishing a first communication between the first network device and a second network device using the first interprocess communication data structure and the first network address, wherein the first communication passes through the common physical layer for the first network device;

10 creating a second interprocess communication data structure associated with a second network address on the first network device, wherein the second network address is different from the first network address; and

establishing a second communication between the first network device and a third network device using the second interprocess communication data structure and the second
15 network address, wherein the second communication passes through the common physical layer for the first network device.

2. (original) A computer readable medium having stored therein instructions for causing a central processing unit to execute the method of Claim 1.

3. (original) The method of Claim 1 wherein the first interprocess

communication data structure is a first socket comprising:

a first socket descriptor with which a first process on the first network device accesses the first interprocess communication data structure; and

5 the first network address.

4. (original) The method of Claim 1 wherein the second interprocess communication data structure is a second socket comprising:

a second socket descriptor with which a second process on the first network device accesses the second interprocess communication data structure; and

5 the second network address.

5. (original) The method of Claim 1 wherein the first network address and the second network address are Internet Protocol addresses.

6. (original) The method of Claim 1 wherein the step of creating the first or second interprocess communication data structure includes calling a reentrant socket networking function that allows multiple network addresses to be allocated.

7. (original) The method of Claim 1 wherein the step of creating the first or second interprocess communication data structure includes calling a reentrant bind socket networking function that allows multiple network addresses to be allocated.

8. (original) The method of Claim 1 wherein the step of establishing the first or

second communication includes calling a reentrant connect socket networking function that allows multiple network addresses to be allocated.